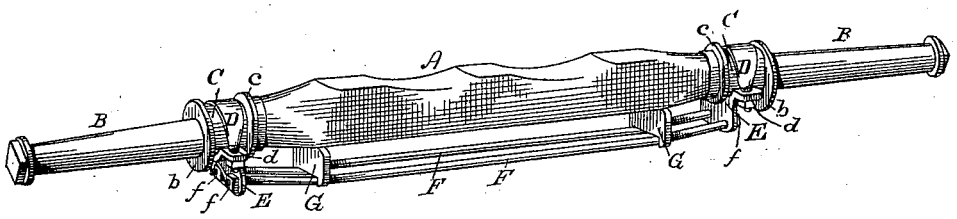
J. HERBY.

Trussed Axle for Wagons.

No. 212,378. Patented Feb. 18, 1879.



Attest:

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UNITED STATES PATENT OFFICE.

JOHN HERBY, OF JAMESTOWN, NEW YORK.

IMPROVEMENT IN TRUSSED AXLES FOR WAGONS.

Specification forming part of Letters Patent No. **212,378**, dated February 18, 1879; application filed December 23, 1878.

To all whom it may concern:

Be it known that I, JOHN HERBY, of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in a Truss for Wagon-Axles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to a truss or support for wagon-axles; and consists in providing that class of wagons having pipe-skeins with a suitable metal clamp having holes through it to receive clips, that pass over the skein and are fastened by nuts and made to extend below the axle to receive the ends of rods that extend from skein to skein, and are held in position by a bridge or bridges, as will be readily understood by the drawing, in which the figure shows an axle with my invention attached thereto.

In farm-wagons and others used to transport heavy loads it has always been found difficult to make axles that would sustain the continued strain brought on them, and they are most liable to break close to the skein; and to overcome this difficulty various methods have been employed, some of which have been somewhat beneficial. This expense and trouble are entirely overcome by my invention.

In the drawing, A represents a common axle-wood. B is a cast pipe-skein, made in the usual form. E is a skein-clamp, made of suitable metal, and formed to fit the under side of the pipe-skein, having a vertical ledge on one edge, that drops far enough below the axle to receive the rods F F, which pass through it, and also lips *d*, having holes through which the clips D pass, after extending over the pipe-skein, and are secured by nuts.

The rods F F are made to extend from the pipe-skein on one end of the axle to that on the other end. They pass through the ledge of the skein-clamp, and are secured by the nuts *f f*.

The bridges G G are properly fastened to the axle a short distance from the skeins, and are made to extend far enough below the end of the rods passing through the clamp to cause the rods F F to stand bracing each way, said rods being held firmly in place by turning up the nuts *f f*.

One bridge in the center of the axle would do; but I prefer to use two, as shown, as they stay the rods in place, and keep them from springing when the wheels strike any obstruction.

Pipe-skeins are commonly held on the axle by a screw-bolt passing into the end of the axle; but this cuts away the timber, and is not as secure as when held by the rods, as in the manner shown.

The clamp and clip being drawn tightly around the pipe-skein greatly strengthens it; and as the skein is larger at the base than at any other part, there is no trouble in clamping them tight enough to hold securely in place, and to make them more secure the clamp may rest against the bead C of the pipe-skein, as shown.

The device may be readily applied to any pipe-skein wagon already built or to be built, as will be readily understood.

I am aware that a single rod extending the length of the axle, and fastened to the pipe-skeins in various forms, has been employed; but this only partially overcomes the liability to break, as any heavy side strain is liable to break the axle before there is much strain on the rod.

As my device provides for both vertical and lateral strain, there is no trouble in making the axle strong enough to carry as heavy a load as any other part of the wagon.

I claim—

In combination with wagon-axles, the skein-clamp E, clip D, truss-rods F F, and bridges G G, used in the manner and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JOHN HERBY.

Witnesses:

W. W. WILSON,

CLARENCE POOLE.